

Amendments to the Claims

Claims 1-64 (Cancelled).

65. (Currently amended) A physical vapor deposition target consisting of an alloy of copper and silver, the silver being present in the alloy at from less than 1.0 at% to 0.001 at%, the alloy having a substantially uniform microstructure and a fine grain size, the physical vapor deposition target being configured for mounting within a physical vapor deposition apparatus.

66. (Previously presented) The physical vapor deposition target of claim 65 wherein the grain size is less than or equal to about 20 micrometers.

67. (Previously presented) The physical vapor deposition target of claim 66 wherein the grain size is about 20 micrometers.

68. (Currently amended) A physical vapor deposition target configured for mounting within a physical vapor deposition apparatus, the physical vapor deposition target consisting of an alloy of copper and silver, the silver being uniformly distributed fine precipitates in the alloy microstructure and being present in the alloy at from less than 1.0 at% to 0.001 at%.

69. (Previously presented) The physical vapor deposition target of claim 68 wherein the alloy has a resistivity of from about 1.7 microohms.cm to about 1.82 microohms.cm.

70. (Previously presented) The physical vapor deposition target of claim 68 wherein the grain size is less than or equal to about 20 micrometers.

71. (Currently amended) A physical vapor deposition target configured for mounting within a physical vapor deposition apparatus, the physical vapor deposition target consisting of an alloy of copper and silver and having a grain size of less than or equal to about 20 micrometers, the silver being present in the alloy at from less than 1.0 at% to 0.001 at%.

72. (Previously presented) The physical vapor deposition target of claim 71 wherein the grain size is about 20 micrometers.

73. (Cancelled).

74. (Currently amended) A physical vapor deposition target configured for mounting within a physical vapor deposition apparatus, the physical vapor deposition target consisting of copper, from less than 1.0 at% to 0.001 at% Sn, and optionally silver, the target having an average grain size of less than or equal to about 30 micrometers.

75. (Previously presented) The physical vapor deposition target of claim 74 comprising silver.

76. (Previously presented) The physical vapor deposition target of claim 75 wherein the silver is present at from less than 1.0 at% to 0.001 at%.

77. (Previously presented) The physical vapor deposition target of claim 75 wherein the average grain size is less than or equal to about 20 micrometers.

78-80 (Cancelled).

81. (Currently amended) A physical vapor deposition target configured for mounting within a physical vapor deposition apparatus, the physical vapor deposition target consisting of a copper material having at least one element selected from the group consisting of silver and tin, the at least one element being present at from less than 1.0 at% to 0.001 at%, the material having an average grain size of less than about 30 micrometers, having an electrical resistivity of from about 1.7 microohms.cm to about 1.82 microohms.cm, and having an electromigration resistance higher than copper of the same grain size having a purity of greater than 99.999%.

82. (Previously presented) The physical vapor deposition target of claim 81 wherein the resistivity is less than about 1.8 microhm.cm.

83. (Cancelled)

84. (Previously presented) The physical vapor deposition target of claim 81 wherein the at least one element is tin.

85. (Previously presented) The physical vapor deposition target of claim 81 wherein the at least one element is silver.

Claims 86-88. (Cancelled)